

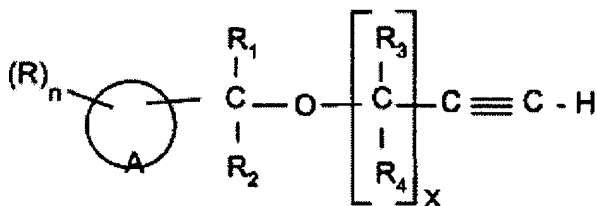
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-22. (Canceled)

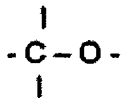
23. (Currently amended) A process for preparing a substituted mixed alkynyl ether of ~~benzyl/alkynyl type~~ from a starting mixed alkynyl ether of ~~benzyl/alkynyl type~~ comprising a hydrogen atom on a triple bond, said process comprising the steps of:
a) reacting a said starting mixed ether of ~~benzyl/alkynyl type, derived from a benzyl type alcohol and an alkynyl alcohol, carrying a hydrogen atom on a triple bond~~ of the following formula (I):



(I)

wherein:

- A represents a residue of a cycle forming all or a part of an aromatic, monocyclic or polycyclic, carbocyclic or heterocyclic system comprising at least one group of formula:



- R represents one or more substituent(s), which are identical or different,

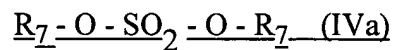
- R₁ and R₂, which are identical or different, represent a hydrogen atom, a functional group, a hydrocarbon group containing 1 to 24 carbon atoms, which is linear or branched, saturated or unsaturated, an acyclic, saturated or unsaturated, aliphatic group, a monocyclic, polycyclic or aromatic cycloaliphatic group, or a linear or branched, saturated or unsaturated aliphatic group having a cyclic substituent,

- R₃ and R₄, which are identical or different, represent a hydrogen atom or a hydrocarbon group containing 1 to 12 carbon atoms,

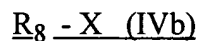
- n is a number smaller than or equal to equal to 5, and

- x is a number from 1 to 10, with an alkylation agent, which is:

a dialkylsulphate of formula (IVa):



wherein R₇ represents a linear or branched alkyl group containing 1 to 6 carbon atoms, or a halide compound of formula (IVb):



R₈ represents a hydrocarbon group containing 1 to 20 carbon atoms, which is a linear or branched, saturated or unsaturated, acyclic aliphatic group; a saturated, unsaturated or aromatic, monocyclic or polycyclic cycloaliphatic group; or a linear or branched, saturated or unsaturated aliphatic group carrying a cyclic substituent; and

X represents a bromine, chlorine or iodine atom;

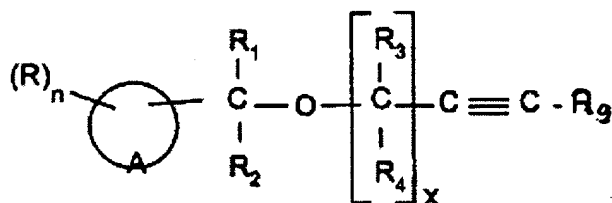
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in the presence of an anionisation agent which is an amide base, a metallic alcoholate or an alkali metal, and

b) recovering said substituted mixed alkynyl ether of formula (IV):



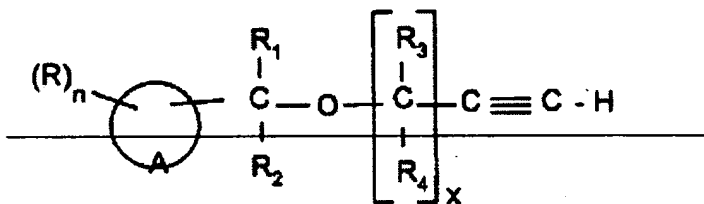
(IV)

wherein A, R, R₁, R₂, R₃, R₄, n and x have the meaning given above, and R₉ represents said R₇ or R₈ group.

24. (Canceled)

25. (Currently amended) A process according to claim 23 24, wherein x is a number from 1 to 5.

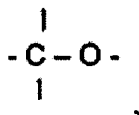
26. (Currently amended) A process according to claim 23, ~~wherein in that the starting mixed ether of benzyl/alkynyl type has the following general formula (I):~~



(I)

wherein:

- A represents a residue of a cycle forming all or a part of an aromatic, monocyclic or polycyclic, carbocyclic or heterocyclic system comprising at least one group of formula:



- R represents one or more substituent(s), which are identical or different,

- R₁ and R₂, which are identical or different, represent:

- a linear or branched, saturated or unsaturated, acyclic alkyl group, having an hydrocarbon chain, comprising 1 to 6 carbon atoms, the hydrocarbon chain being optionally interrupted by a heteroatom, or a functional group, and carrying optionally substituents,

- a linear or branched, saturated or unsaturated, acyclic aliphatic group carrying a cyclic substituent, being optionally substituted, said acyclic group being connected to the cycle via a covalent bond, a heteroatom or a functional group,

- a carbocyclic group, saturated or comprising 1 or 2 unsaturated bonds in the cycle, containing 3 to 8 carbon atoms in the cycle, said cycle being optionally substituted,

- an aromatic monocyclic carbocyclic group, containing at least 4 carbon atoms in the cycle, said cycle being optionally substituted, or

- a CF₃ group, for one of groups R₁ and R₂.

- R₃ and R₄, which are identical or different, represent a hydrogen atom or a hydrocarbon group containing 1 to 12 carbon atoms,

- n is a number smaller than or equal to 5, and

- x is a number from 1 to 10.

27. (Currently amended) A process according to claim ~~23~~ 24, wherein A is a residue of a cyclic compound comprising at least 4 carbon atoms in the cycle, optionally substituted, and representing at least one of the following cycles:

- an aromatic, monocyclic or polycyclic carbocycle, or
- an aromatic, monocyclic or polycyclic heterocycle comprising at least one heteroatom selected from the group consisting of O, N or S.

28. (Previously presented) A process according to claim 27, wherein A is a residue of a benzene or naphthalene cycle, optionally substituted.

29. (Previously presented) A process according to claim 27, wherein A carry one or more electron-donating group(s) selected from the group consisting of:

- linear or branched alkyl groups,
- linear or branched alkenyl groups,
- linear or branched halogenoalkyl groups,
- cycloalkyl groups comprising 3 to 6 carbon atoms,
- a phenyl group,
- alkoxy groups of formula R_5-O- or thioether groups of formula R_5-S- , wherein R_5 represents a linear or branched alkyl group comprising 1 to 6 carbon atoms, or a phenyl group,

- groups of formula $-N-(R_6)_2$, wherein R_6 groups, which are identical or different, represent a hydrogen atom, a linear or branched alkyl group comprising 1 to 6 carbon atoms, or a phenyl group, and
- a $-CF_3$ group.

30. (Previously presented) A process according to claim 27, wherein A carry one or more electron-donating group(s) selected from the group consisting of:

- linear or branched alkyl groups, comprising 1 to 4 carbon atoms,
- linear or branched alkenyl groups, comprising 2 to 4 carbon atoms,
- linear or branched halogenoalkyl groups, comprising 1 to 4 carbon atoms,
- a cyclohexyl group,
- a phenyl group,
- alkoxy groups of formula R_5-O- or thioether groups of formula R_5-S- , wherein R_5 represents a linear or branched alkyl group comprising 1 to 4 carbon atoms, or a phenyl group,
- groups of formula $-N-(R_6)_2$, wherein R_6 groups, which are identical or different, represent a hydrogen atom, a linear or branched alkyl group comprising 1 to 4 carbon atoms, or a phenyl group, and
- a $-CF_3$ group.

31. (Currently amended) A process according to claim 23 ~~24~~, wherein n is greater than or equal to 2, two groups R and 2 successive atoms on the aromatic cycle being bonded together via an alkylene, alkenylene or alkenylidene group containing 2 to 4 carbon atoms, to form a saturated, unsaturated or aromatic heterocycle containing 5 to

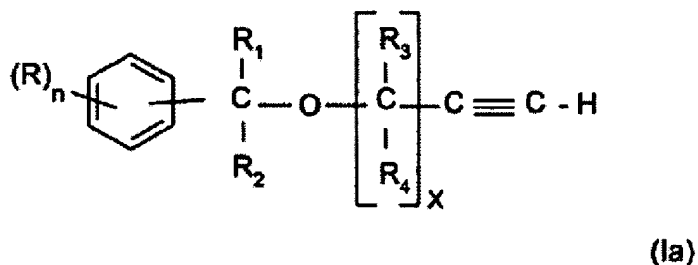
7 carbon atoms, one or more carbon atoms being optionally replaced by a further heteroatom.

32. (Currently amended) A process according to claim 23 ~~24~~, wherein n is greater than or equal to 2, two groups R and 2 successive atoms on the aromatic cycle being bonded together via an alkylene, alkenylene or alkenylidene group containing 2 to 4 carbon atoms, to form a saturated, unsaturated or aromatic heterocycle containing 5 to 7 carbon atoms, one or more carbon atoms being optionally replaced by a further oxygen atom.

33. (Currently amended) A process according to claim 23 ~~24~~, wherein R₃ and R₄, which are identical or different, represent a hydrogen atom or a linear or branched alkyl group containing 1 to 12 carbon atoms.

34. (Previously presented) A process according to claim 33, wherein R₃ and R₄, which are identical or different, represent a hydrogen atom or a linear or branched alkyl group containing 1 to 4 carbon atoms.

35. (Currently amended) A process according to claim 23, wherein that the starting mixed ether of ~~benzyl/alkynyl type~~ has the following ~~general~~ formula (Ia):

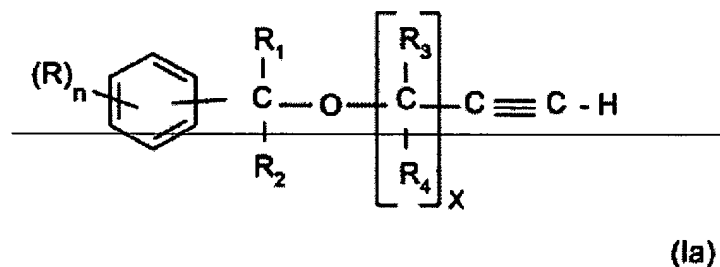


wherein:

- n is a number equal to or smaller than 4,

- x is a number equal to 1, 2 or 3,
- R group or groups are electron-donating groups,
- R₁ and R₂ groups, which are identical or different, represent:
 - a hydrogen atom,
 - a linear or branched alkyl group containing 1 to 6 carbon atoms,
 - a cycloalkyl group containing 3 to 8 carbon atoms,
 - a phenyl group,
 - a phenylalkyl group containing 7 to 12 carbon atoms, or
 - a CF₃ group, and
- R₃ and R₄ groups, which are identical or different, represent a hydrogen atom or a linear or branched alkyl group containing 1 to 4 carbon atoms.

36. (Currently amended) A process according to claim ~~35~~ 23, wherein ~~that the starting mixed ether of benzyl/alkynyl type has the following general~~ in formula (Ia):

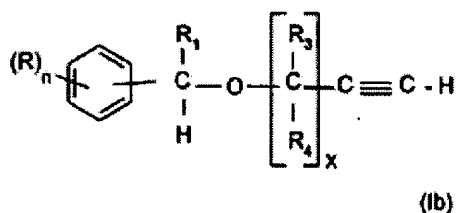


wherein:

- n is 1 or 2,
- x is a number equal to 1, 2 or 3,
- R group or groups are methylenedioxy or ethylenedioxy groups,
- R₁ and R₂ groups, which are identical or different, represent:

- a hydrogen atom,
- a methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, tert-butyl group,
- a cyclopentyl or cyclohexyl group,
- a phenyl group,
- a benzyl group, or
- a CF_3 group, and
- R_3 and R_4 groups, which are identical or different, represent a hydrogen atom or a linear or branched alkyl group containing 1 to 4 carbon atoms.

37. (Currently amended) A process according to claim 23, wherein the starting mixed ether of benzyl/alkynyl type has the following formula (Ib):



wherein:

- n is equal to 1 or 2,
- R group or groups represent an alkyl or alkoxy group containing 1 to 4 carbon atoms, or a methylenedioxy group, and
- R_1 represents a hydrogen atom or a linear or branched alkyl group containing 1 to 4 carbon atoms.

38. (Currently amended) A process according to claim 23, wherein the starting mixed ether of benzyl/alkynyl type is [1-(prop-1-ynyloxy)ethyl]-3,4 dimethoxybenzene.

39-41. (Canceled)

42. (Currently amended) A process according to claim 23 ~~41~~, wherein X represents a chlorine atom or an iodine atom and R₈ represents a linear or branched alkyl group containing 1 to 4 carbon atoms.

43. (Currently amended) A process according to claim 23 ~~39~~, wherein the alkylation agent is dimethylsulphate, methyl iodide, methyl chloride, chloroethane, methyl bromide or bromoethane.

44. (Canceled)

45. (Currently amended) A process according to claim 23 ~~44~~, wherein the anionisation agent is selected from the group consisting of lithium diisopropylamide, and lithium hexamethyldisilazane, ~~prepared or used in situ by the action of a strong lithiated base on a corresponding amine, alkali metal alcoholates, sodium, and potassium.~~

46. (Previously presented) A process according to claim 45, wherein the alkali metal alcoholate is sodium or potassium methylate, ethylate or tert-butate.

47. (Previously presented) A process according to claim 45, wherein the anionisation agent is sodium or potassium amide.

48. (Previously presented) A process according to claim 23, wherein the reaction is carried out in an organic solvent that is inert towards the anionisation agent.

49. (Previously presented) A process according to claim 48, wherein the organic solvent is an aliphatic or aromatic hydrocarbon.

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50. (Previously presented) A process according to claim 23, wherein the temperature of the reaction is comprised between 20°C and a reflux temperature of the reaction mixture.

51. (Previously presented) A process according to claim 50, wherein the temperature is comprised between 50°C and 80°C.

52. (Currently amended) A process according to claim 23 ~~24~~, wherein the starting mixed ether of benzyl/alkynyl type of formula (I) and the anionisation agent are brought into contact in a reaction medium, the reaction medium being heated to a desired temperature, the alkylation agent being then added, and the substituted mixed ether of benzyl/alkynyl type obtained being recovered.